

Biology Toolkit: Indicator 3.3.3

Student Handout: Biology: Indicator 3.3.3

Goal 3.0 Concepts Of Biology

Expectation 3.3 The student will analyze how traits are inherited and passed on from one generation to another.

Indicator 3.3.3 The student will explain how a genetic trait is determined by the code in a DNA molecule.

Assessment Limits:

definition of gene (a segment of DNA that codes for a protein or RNA) sequence of nitrogen bases directing protein formation (role of DNA, mRNA, tRNA, rRNA)

proteins determine traits

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Biology Indicator 3.3.3

Which of these <u>best</u> describes the correct sequence in the expression of a trait?

- A. trait \rightarrow gene \rightarrow enzyme
- B. gene \rightarrow protein \rightarrow trait
- C. protein \rightarrow gene \rightarrow trait
- D. gene \rightarrow trait \rightarrow DNA

Correct Answer

B. gene \rightarrow protein \rightarrow trait

Item

Which of these <u>best</u> describes the correct sequence in the expression of a trait?

- A. $trait \rightarrow gene \rightarrow enzyme$
- B. gene \rightarrow protein \rightarrow trait
- C. protein \rightarrow gene \rightarrow trait
- D. gene \rightarrow trait \rightarrow DNA